



## ***Red Hat Enterprise Linux Release 9.2 Manual Pages on 'tpm2\_gettestresult.1' command***

### ***\$ man tpm2\_gettestresult.1***

tpm2\_gettestresult(1)    General Commands Manual    tpm2\_gettestresult(1)

#### **NAME**

tpm2\_gettestresult(1) - Get the result of tests performed by the TPM

#### **SYNOPSIS**

tpm2\_gettestresult [OPTIONS]

#### **DESCRIPTION**

tpm2\_gettestresult(1) will return the result of the tests conducted by the TPM.

Error code will state if the test executed successfully or have failed.

If pending algorithms are scheduled to be tested, tpm2\_gettestresult will return ?TESTING?. Otherwise ?FAILED? will be returned or ?SUC? CESS? depending on the result to the test.

Manufacturer-dependent information will also be printed in raw hex for? mat.

#### **OPTIONS**

This tool accepts no tool specific options.

#### **COMMON OPTIONS**

This collection of options are common to many programs and provide in? formation that many users may expect.

? -h, --help=[man|no-man]: Display the tools manpage. By default, it attempts to invoke the manpager for the tool, however, on failure will output a short tool summary. This is the same behavior if the ?man? option argument is specified, however if explicit ?man? is re?

requested, the tool will provide errors from `man` on `stderr`. If the `?no-man?` option is specified, or the manpager fails, the short options will be output to `stdout`.

To successfully use the manpages feature requires the manpages to be installed or on `MANPATH`, See `man(1)` for more details.

`? -v, --version`: Display version information for this tool, supported tctis and exit.

`? -V, --verbose`: Increase the information that the tool prints to the console during its execution. When using this option the file and line number are printed.

`? -Q, --quiet`: Silence normal tool output to `stdout`.

`? -Z, --enable-errata`: Enable the application of errata fixups. Useful if an errata fixup needs to be applied to commands sent to the TPM.

Defining the environment `TPM2TOOLS_ENABLE_ERRATA` is equivalent.

## TCTI Configuration

The TCTI or ?Transmission Interface? is the communication mechanism with the TPM. TCTIs can be changed for communication with TPMs across different mediums.

To control the TCTI, the tools respect:

1. The command line option `-T` or `--tcti`
2. The environment variable: `TPM2TOOLS_TCTI`.

Note: The command line option always overrides the environment variable.

The current known TCTIs are:

`? tabrmd` - The resource manager, called `tabrmd` (<https://github.com/tpm2-software/tpm2-abrmd>). Note that `tabrmd` and `abrmd` as a tcti name are synonymous.

`? mssim` - Typically used for communicating to the TPM software simulator.

`? device` - Used when talking directly to a TPM device file.

`? none` - Do not initialize a connection with the TPM. Some tools allow for off-tpm options and thus support not using a TCTI. Tools that do not support it will error when attempted to be used without a TCTI

connection. Does not support ANY options and MUST BE presented as the exact text of ?none?.

The arguments to either the command line option or the environment variable are in the form:

<tcti-name>:<tcti-option-config>

Specifying an empty string for either the <tcti-name> or <tcti-option-config> results in the default being used for that portion respectively.

## TCTI Defaults

When a TCTI is not specified, the default TCTI is searched for using dlopen(3) semantics. The tools will search for tabrmd, device and mssim TCTIs IN THAT ORDER and USE THE FIRST ONE FOUND. You can query what TCTI will be chosen as the default by using the -v option to print the version information. The ?default-tcti? key-value pair will indicate which of the aforementioned TCTIs is the default.

## Custom TCTIs

Any TCTI that implements the dynamic TCTI interface can be loaded. The tools internally use dlopen(3), and the raw tcti-name value is used for the lookup. Thus, this could be a path to the shared library, or a library name as understood by dlopen(3) semantics.

## TCTI OPTIONS

This collection of options are used to configure the various known TCTI modules available:

? device: For the device TCTI, the TPM character device file for use by the device TCTI can be specified. The default is /dev/tpm0.

Example: -T device:/dev/tpm0 or export TPM2TOOLS\_TCTI=?device:/dev/tpm0?

? mssim: For the mssim TCTI, the domain name or IP address and port number used by the simulator can be specified. The default are 127.0.0.1 and 2321.

Example: -T mssim:host=localhost,port=2321 or export TPM2TOOLS\_TCTI=?mssim:host=localhost,port=2321?

? abrmd: For the abrmd TCTI, the configuration string format is a se?

ries of simple key value pairs separated by a `,` character. Each key and value string are separated by a `=` character.

? TCTI abrmd supports two keys:

1. `bus\_name` : The name of the tabrmd service on the bus (a string).
2. `bus\_type` : The type of the dbus instance (a string) limited to `session` and `system`.

Specify the tabrmd tcti name and a config string of bus\_name=com.ex?

ample.FooBar:

```
\--tcti=tabrmd:bus_name=com.example.FooBar
```

Specify the default (abrmd) tcti and a config string of bus\_type=ses?

sion:

```
\--tcti:bus_type=session
```

NOTE: abrmd and tabrmd are synonymous.

## EXAMPLES

Get the result of the TPM testing

```
tpm2_gettestresult
```

## NOTES

This command is the one of the few commands authorized to be submitted to TPM when in failure mode.

## Returns

Tools can return any of the following codes:

- ? 0 - Success.
- ? 1 - General non-specific error.
- ? 2 - Options handling error.
- ? 3 - Authentication error.
- ? 4 - TCTI related error.
- ? 5 - Non supported scheme. Applicable to tpm2\_testparams.

## BUGS

Github Issues (<https://github.com/tpm2-software/tpm2-tools/issues>)

## HELP

See the Mailing List (<https://lists.01.org/mailman/listinfo/tpm2>)